#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013496 Address: 333 Burma Road **Date Inspected:** 30-Apr-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

> **Component:** OBG

**Summary of Items Observed:** 

**Bridge No:** 

34-0006

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TRIAL ASSEMBLY YARD

MAGNETIC PARTICLE INSPECTION

**OBG SEGMENT 7CE-7DE ZPMC NWIT No: 005635** 

This Q.A Inspector performed Magnetic Particle testing of approximately 15% of the area previously tested and accepted by ZPMC Quality control personnel. This QA Inspector generated a (M.T) report for this date. The members are identified as the transverse splice between OBG segment 7CE and 7DE. The welds Designation are as follows.

OBE7A-003, 002, 001, 004, 005 OBE7C-001, 002, 003, 004, 005

This QA Inspector randomly observed the following work in progress.

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#### **OBG LIFT 7WEST**

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067079 performing Flux cored Arc Welding process for weld OBW7N-007 located on PCMK. Counter weight connection plate. ZPMC QC Mr. Wang Zhu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-T-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045209 performing Flux cored Arc Welding process for weld OBW7N-005 located on PCMK. Counter weight connection plate. ZPMC QC Mr. Wang Zhu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-T-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 048714 performing Flux cored Arc Welding process for weld OBW7N-004 located on PCMK. Counter weight connection plate. ZPMC QC Mr. Wang Zhu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2232-TC-U4B-F-2.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045221 performing Shielded Metal Arc Welding process for weld OBW7A-006 located on PCMK. Edge panel splice weld between OBG segment 7DW and 7EW (counter weight side). ZPMC QC Mr. Wang Zhu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2213-B-U2-FCM-1.

This Quality Assurance (QA) Inspector observed ABF QA Inspector performing Ultrasonic inspection on the weld between deck panel and edge panel (counter weight side) of OBG segment 7AW.

This Quality Assurance (QA) Inspector observed ZPMC QA Inspector performing magnetic particle inspection on the side panel splice weld between OBG segment 7CW-7DW (counter weight side).

This Quality Assurance (QA) Inspector observed ZPMC qualified welders 037996, 066413, performing Shielded Metal Arc Welding process for weld OBE7C-007 located on PCMK. Side panel splice weld between OBG segment 7DW and 7EW (counter weight side). ZPMC QC Mr. Li Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welders 045196 performing Shielded Metal Arc Welding process for weld OBE7C-006 located on PCMK. Side panel splice weld between OBG segment 7DW and 7EW (counter weight side). ZPMC QC Mr. Li Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

#### **OBG SEGMENT 7DE**

This Quality Assurance (QA) Inspector observed ZPMC personnel performing heat straightening on the bottom panel rib stiffener. The rib stiffener identified as RS24P on bottom plate BP173 Heat straightening report identified as HSR1 (B)-8403.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract

# WELDING INSPECTION REPORT

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documents.





## **Summary of Conversations:**

No relevant conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Utekar, Shrikant	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer